

General

30 MAR 2012

A-Preflight

B-Cockpit Procedures

C-Crew Resource Management

D-Operating Procedures

****INFORMATION CONTAINED IN THE FOLLOWING STAN NOTES IS NOT A SUBSTITUTE FOR
SOUND JUDGEMENT OF THE PILOT IN COMMAND****

A1. Students are not authorized to motor starters unsupervised, unless they have signed for the aircraft.

A2. Delete T-44A FTI Pg 4-113, Para 3a (T-44C FTI Pg 4-117, Para 3a) and replace with the following:

"GPS NOTAMs. Review NOTAMs by referring to the installation NOTAMs for your destination and alternates. GPS satellite outages are issued as GPS NOTAMs under the "KGPS" identifier. The NOTAM will list the satellite's Pseudo Random Noise (PRN) Number followed by a "U/S" indicating that the satellite is unserviceable and cannot be used for navigation. It is important that any affected satellites be deselected to ensure that they are not used for the RAIM calculations."

B1. Update T-44A FTI Appendix F, Pg. F-31, Step g.i: Replace "391 (Rockport LOM)" with "353 (Brooks Co.)" and replace "0382" with "0353".

B2. Update T-44A FTI Appendix F, Pg. F-32, Step 2.g.iii: Replace "approximately 290 to 300 degrees" with "approximately 230 to 270 degrees".

B3. Update T-44A FTI Appendix F, Pg. F-37 (T-44C Appendix F, Pg. F-29-30), Step 7. Pressurization: Delete paragraph under "Pressurized, CP checks" and replace with the following verbiage:

"Depending on ambient altitude and system efficiency, the differential (short needle) should increase from zero as the cabin pressurizes. The long needle will indicate cabin altitude. If desired cabin pressure indications are not correct, call for the Loss of Pressurization checklist."

B4. Change T-44A and T-44C FTI Pg. 2-8 paragraph 2 from "170 KIAS" to "150 KIAS."

B5. Change T-44A FTI Pg. F-13 paragraph 5 and T-44C FTI Pg. F-12 paragraph 4. After "Brief the copilot" add "Keep me clear on the right during all taxi and ground ops and let base know we are out of the chocks."

B6. Change T-44A and T-44C FTI Pg. B-2 first sentence. Delete "Once you complete checking Radios and NAVAIDS" and replace with "After FMS is called for"

B7. Change T-44A and T-44C FTI Pg. F-6 paragraph F102. Delete the second sentence of the third paragraph and replace with "The pilot will time the duration of starter usage and the CP will time from condition lever to low idle and inform the pilot if there is no light-off within ten seconds; the CP will also monitor the fire guard." Change Pg. F-7 paragraph F102.4 third sentence to read as follows "CP commences timing when P moves condition lever to low idle and informs P if there is no light-off within 10 seconds." There

is no requirement for the CP to inform the P how many seconds elapsed from Low Idle to light off.

B8. Change T-44A and T-44C FTI phrases on Pgs. 1-9, 1-11, B-2 and B-6 of "position and hold" to "line up and wait."

B9. All references to checklist challenges and responses in FTI Appendix F should be changed to reflect the information set forth in the NATOPS checklist. Example: Change P and CP to PF/PM/LS/RS where appropriate. Change response to "OXYGEN" challenge in before start checklist from "ARMED" to "OPEN".

B10. Update T-44A FTI Appendix F, Pg. F-15 (T-44C Pg. F-16) paragraph F104.1 Parking Brake. Add: Brief the CP to "Monitor for movement during the engine runup."

B11. Update T-44A FTI and T-44C FTI Pg. 1-30 paragraph 2.b Crosswind Turn: Add as the last sentence: "Complete the landing checklist as soon as practicable after the point where flaps are normally selected to approach."

B12. Update T-44A FTI and T-44C FTI Pg. 1-31 paragraph 2.c Downwind. Remove the sentence: "Just prior to midfield, call for the 'landing checklist'."

B13. Update T-44A FTI and T-44C FTI Pg. B-7 and B-8 for VFR Takeoff and IFR Takeoff. Delete step a. for both VFR Takeoff and IFR Takeoff and replace with: *On initial takeoff PF States: "Back me up on the power quadrant and monitor the engine and flight instruments. Call out any malfunctions. All malfunctions will be handled in accordance with NATOPS. Call rotate at 91 knots and note the time of takeoff."* Following each respective pilot's initial takeoff briefing, each subsequent takeoff can be briefed as *"Takeoff procedures are standard, rotate at 91 knots."*

C1. When conducting PF duties, students shall ensure all appropriate comms are completed. However, in an effort to reduce comm workload, PM may initiate standard comms without direction. PF should verbalize all clearances with PM as soon as practicable following PM read back.

C2. Emergency checklists are challenge-response-response. Instructors shall ensure the student verbalizes the correct responses to all checklist items. (To facilitate good CRM, students may add "left/right" to the response but this is not required and does not detract from standardization).

C3. The only required communication on the runway during initial takeoff should be "rotate", "abort", or "[state a malfunction]".

D1. SSE full stop training shall only be performed on a dry runway. Effects of crosswind on rollout shall be discussed.

D2. PF and PM shall never both be heads down in the cockpit.

D3. There is not an exact method to determine ½ to 1 inch of ice accumulation, but the standardized method is to use the stall strip. Once the stall strip is covered the boots should be inflated as that approximates ½ inch of ice buildup. The wingtip glare shield pinhole should not be used because it is too far from the leading edge and not in a uniform position.

D4. The full Emergency Shutdown Checklist should be accomplished prior to accomplishing the Starter-Assisted Airstart Checklist.

D5. To clarify the procedures for "LH/RH NO FUEL TRANSFER" indications, "OVERRIDE" should not be selected unless the fuel is needed to continue to the destination. "OVERRIDE" should not be used solely to complete training events. Once the aircraft is at its destination, additional troubleshooting may be completed to assist in writing MAFs.

D6. When handling a fire warning light that has no secondary indications, SMAs shall provide the instructor with sound reasoning and their risk assessment if they elect to leave the engine running. NATOPS states that "Even if no secondary indications are observed, consideration should be given to shutdown of the affected engine."

D7. When performing the Emergency Shutdown Checklist, do not configure or call for the landing checklist until the required memory items have been completed.

D8. All non-memory item checklists will be referenced during performance to include the landing checklist.

D9. The pilot at the controls shall open the side window and visually exchange a thumbs-up with the lineman once the prop is feathered and the aircraft is depressurized prior to any personnel approaching the aircraft.

A1. The MPTS describes the I4790 as "a comprehensive evaluation of IFR procedures..." In addition to being the student's initial instrument qualification checkride (satisfying MPTS and Instrument Rating Request Form), the flight is also an assessment of the student's ability to safely execute the Airnav solo. A complete profile should incorporate aspects of flight the students will experience on I4801, such as airway travel, an enroute climb and descent, and an arrival phase into an airport.

A2. Delete T-44A FTI Pg. 2-15, Para. 2a and replace as follows: "Entry. Partial Panel approaches to stalls are performed in the same manner as Contact approaches to stalls. NOTE: Partial panel approach turn stalls shall not be performed."

B1. In addition to circumstances which require aircrews to notify ATC when changing altitude, pilots are encouraged to give noncompulsory advisory calls when climbing or descending. For example, if cleared to cross an IAF at 4,000 ft, then cleared for the approach, aircrews are encouraged to transmit "Corpus Approach, Navy 1G450 leaving 4000 on the approach" or similar verbiage. This is intended to reduce the chances of aircrews leaving altitude prematurely and earning a flight deviation.

B2. When requesting an approach from ATC in the local area, let the controller know if you plan to fly other than a 45/180.

Contact

30 MAR 2012

A-Takeoff/Abort

B-High Work

C-Landing Pattern

A1. Students will be briefed that if power has been advanced and they are past the two thousand feet remaining marker on a touch and go, they should continue the takeoff and handle any malfunctions once airborne. Do not try to abort at this time.

C1. Touch and gos, full stop landings, and wave-offs, completed with the SMA as PM, do not count against the landing pattern limits, as set forth in the CTW4 SOP (COMTRAWINGFOURINST 3710.11 Series).

C2. Update T-44A FTI Pg 1-38 (T-44C FTI Pg 1-38) "CONTACT PATTERN - CASE 2 - CROSSWIND" GUIDANCE AS FOLLOWS:

Replace: "Maintain a minimum of 110 KIAS."

With: "Maintain 102 KIAS (Vxse) or 110 KIAS (Vyse), depending on climb performance."

C3. Update T-44A FTI Pg 1-30, Para 2.a (T-44C FTI Pg 1-30, Para 2.a):
"Normal interval if a T-34 is in the pattern is 30 degrees behind the wing."

C4. Change T-44A and T-44C FTI Pg 1-38 Case 2. Crosswind Turn. Paragraph a. Delete the second sentence "Roll wings level regardless of malfunction." And replace with "Roll wings level for any malfunction associated with an engine."

C5. During Case II Pattern work students should roll wings level anytime a malfunction is associated with the engine and proceed as directed in the FTI. If the malfunction isn't engine related, students are encouraged to continue with the turn and handle the malfunction while maintaining pattern parameters.

C6. Delete "recommended" in the parentheses in the 6th sentence from the T-44A and T-44C FTI P 1-40 Case 5.

C7. A maximum of 4 planes will be permitted in the pattern at Cabaniss.

T-44C Specific

30 MAR 2012

A-Preflight

B-Cockpit Procedures

C-Systems Utilization

A1. Even though the T-44C meets the requirements for filing BE9L/R, do not file /R until Advisory Circular 90-100a is read and understood to include Type 1 and 2 Departure Procedures and STAR filing requirements.

A2. All T-44C students and instructors are responsible for the information found in the current T-44C "RI Guidelines" and "T-44C FMS powerpoint." A current copy can be obtained electronically from the VT-31 website or in hard copy from the T-44C Department.

A3. The AUX Battery in the forward avionics compartment shall be tested to ensure a charge for 5 seconds during preflight.

B1. Change to T-44C FTI Appendix F, page F-13 [See 6. ESIS Switch (NOTE 2)]: Replace "aircraft essential bus" with "Avionics Essential Bus".

B2. Aircrew should not physically touch the screens of the PFD's, ESIS, MFD or FMS at anytime. Further, care must be exercised not to impact the selector switches on the center console with seat belts or any other foreign objects.

B3. PF and PM shall never both be heads down in the cockpit. This applies not only to the Flight Management System (FMS), but also the Remote Tuning Unit (RTU), Multi-function Display (MFD), and Primary Flight Display (PFD) functions.

B4. Pg. F-19 paragraph F105 1.a after "indication." Add "P ensures flight controls operate freely."

B5. It is permissible and recommended to perform the stall warning, pitot heat, autopilot/yaw damp, electric trim, and radar checks while the ESIS is aligning.

B6. FTI Pg. F-5 paragraph 18 Overhead Lights delete "ensures oxygen valve closed."

B7. FTI Pg. F-19 after CP reports "Engine Runup Checklist complete." Add the following: "NOTE After the Engine Runup Checklist is complete, the pilot shall reset N1 via the condition levers as appropriate per NATOPS Figure 4-2."

B8. The typical voice response in FTI Appendix F for PFDS/FGP during the takeoff and approach checklists is not required. Time permitting, however, the typical voice response is a good technique to ensure proper setup.

B9. FTI Pg. B-10, Paragraph B103.2 Dual AHRS Failure and Paragraph B103.3 Dual Primary Flight Display Failure. Prior to the respective steps of check the circuit breakers and... for each procedure, add: "Can I proceed VMC? [IP will respond yes or no]"

B10. FTI Pg. F-24, Delete step f. Perf-Enter cruise altitude 1000' for VNAV actuation of Top of Descent profile.

C1. If at any point the T-44C autopilot maneuvers/does not maneuver in a manner that matches the PF's intentions, the autopilot shall be disengaged. Re-engagement may be initiated once flight parameters are regained. Caution should be exercised in case of out of trim condition.

C2. Terrain Warnings should be inhibited while conducting landing pattern work at Cabaniss or any other authorized field that does not appear in the T-44C Integrated Hazard Avoidance System (IHAS) database. To inhibit the terrain warnings select TERR and hold MODE until the message Terrain Inhibit appears. Reverse the procedure to reactivate the terrain warnings.

C3. BLUE vs. GREEN (Radar Vectors for a GPS final approach course): Students have the option to fly either method. Keep in mind the "Blue" method is taught in the simulator. Also, make sure to verify the proper course before the (IP) hits the execute button. Both Method #1 (BLUE) and Method #2 (GREEN) are explained in amplified detail in the current RI Guidelines product.

C4. Although the T-44C is RNAV capable without an operating GPS, RNAV(GPS) approaches are only authorized with an operable GPS.

C5. The following standardizes LOC BC when utilizing the ESIS. When a localizer is in Nav 1 another menu option is available; "LOC BC." In order to not have reverse sensing the pilot must select this during the PFD/FGP portion of the approach check list. For standardization, set the back course in the ESIS as the inbound course.

A-Brief
B-Enroute
C-T-44C
D-FTI

A1. Prior to each flight, all instructors shall refer to the USAF Bird Avoidance Model. Plan the route to avoid areas of severe bird activity. Flight into these areas at low altitudes is prohibited.

A2. Due to crew rest concerns, it is permissible for students to borrow charts from the VT31 master chart file on the following events: N4203, N4301, T4201, and T4202. SMAs will verify that these borrowed charts are current and chummed accurately before the brief.

B1. Instructors should verify radius of turn was not used at the route entry point or the initial point (IP) on student charts.

B2. It is acceptable to leave the Propeller Autofeather Switch in the "ARM" position during these flights due to the relatively low altitudes, high power settings, and increased AOBs at which these flights are flown.

B3. TACFORM qualified instructors are not considered qualified for emergency gear checks.

B4. On syllabus flights N4201-03, N4301 and T4390, students should only be allowed to use "Clock to Map to Ground" for navigation. Use of advanced avionics while not leading Tactical Formation flights will be at the individual IP's discretion.

B5. Lead makes all "99" calls during TACFORM flights.

C1. TAS procedures - The lead aircraft in a formation will maintain the TAS and Transponder ON (T-44C only formation). Other aircraft in the formation will verify their TAS and Transponder in Standby prior to taking the active runway for departure. Also, after a lead change is complete the new lead aircraft will assume TAS and Transponder duties. This exchange of TAS and Transponder duties to the new lead aircraft will be verified on the formation interplane frequency. In dissimilar formation of T-44A and T-44C, a T-44C should maintain the TAS and Transponder to mitigate traffic conflicts.

D1. Add the following to the first paragraph pg 2-17 of the Tac/LL FTI: "If a combat escape is briefed lead will fly 180 KIAS initially until wingmen call in, then lead announces airspeed increase"

D2. Add the following to the second paragraph pg 1-22 of the Tac/LL FTI: "The pilot monitoring is expected to brief the following at the beginning of each leg: Update point(s), overall time status and corrections, and any threats (airfields, other Low-Level route crossings, and any simulated enemy threats)"

A-Brief

B-Enroute

C-T-44C

D-FTI

A1. SMAs shall review and be familiar with the NAVY FORM Binder located in the CDO office prior to briefing F4101. An alternate source of the binder's contents is located on the Unofficial VT-31 Website. SMAs will be responsible for all information located within the binder and be prepared to brief their instructors.

B1. It is acceptable to leave the Propeller Autofeather Switch in the "ARM" position during these flights due to the relatively low altitudes, high power settings, and increased AOBs at which these flights are flown.

B2. Add the following as Paragraph 19a on Page 5-17 (Lost Sight):

x. If lost sight during free cruise: Wing calls, "lost sight and altitude," and Lead calls "altitude" and deconflicts the formation.

C1. TAS procedures - The lead aircraft in a formation will maintain the TAS and Transponder ON. Other aircraft in the formation will verify their TAS and Transponder in Standby prior to taking the active runway for departure. Also, after a lead change is complete TAS/Transponder will be set in accordance with lead instructions, depending on makeup of section type/model/series. This exchange of TAS and Transponder duties to the new lead aircraft will be verified on the formation interplane frequency.

D1. Update Section 501: Change "Playmate" to "Wingman".

D2. Update Section 502, Paragraph 11: Change "Slowing to 150/170" to "Slowing to 150".

D3. Update Section 502, Paragraph 12, Joinup: Change "100-200 feet" to "150 feet".

D4. Update Section 502, Paragraph 16: Change "200 KIAS" to "170 KIAS"

D5. Update Section 502, Paragraph 17a: Remove "Props" from "Flaps/gear/props now, now, now"

D6. Update Section 502, Paragraph 5: Delete Paragraph 5 and replace with:

5. Initial Rendezvous / Departure / Climb out

Running Rendezvous

The running rendezvous is used to join a flight that is proceeding on course. Following takeoff, Lead will climb out via course rules, accelerating to 140 KIAS. Wing will accelerate to lead's airspeed plus 30 KIAS to control rate of closure. The wingman should exploit any turns by cutting inside of lead's turn radius and converting to a CV rendezvous. The wingman should set an abeam distance from lead of about 5 plane widths. If too wide of a distance is chosen, the wing will arrive on the 45 degree bearing line with too large of a distance to close, delaying the join up. If too tight, the wing will not be able to perceive closure. Once established on the 45 degree bearing line, wing will ride the bearing line into starboard parade. This is a

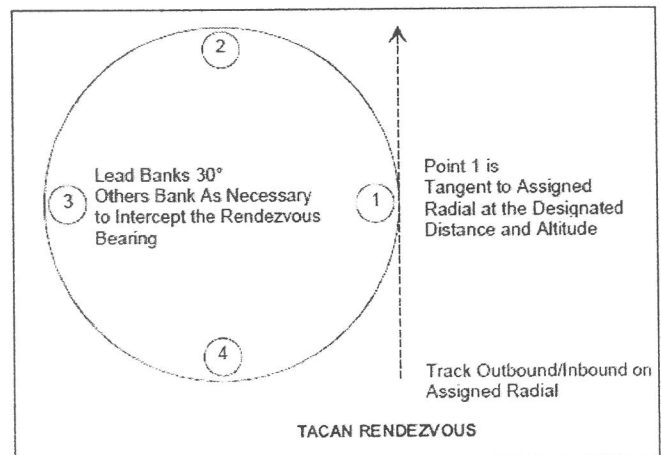
demanding maneuver do the lack of perceived relative motion in the initial stage. When relative motion first appears, reduce power to control closure rate. If excess closure develops and cannot be controlled safely, wing shall execute an underrun. When joined, report, "Two is aboard starboard". Lead shall begin transmitting maneuver commands at this time. During course rules departures, lead may transmit, "Hang with me" in lieu of separate maneuver commands.

CV Rendezvous

A CV rendezvous is used to join a flight in a turn. When safely airborne, wing will execute a turn to get inside of lead's radius of turn and intercept the 60 degree bearing line. Wing will place lead on the horizon, approaching the bearing line wing will reduce angle of bank to avoid becoming acute. Lead will maintain 140 kias during the rendezvous. Wing shall use a maximum of 150 kias until relative motion can be perceived. As the wing approaches approximately 200 feet from lead, wing will transition to 45 degree "Double Step Down". Stabilizing momentarily, wing will use AOB and power to cross under and up into the starboard parade position outside of lead's radius of turn.

Tacan Rendezvous

A Tacan Rendezvous is a visual circular maneuver used to join a flight above the weather after takeoff or if the flight is separated. The TACAN rendezvous is normally executed in a left hand turn tangent to the briefed TACAN radial/DME at 150 KIAS, a specified altitude, and direction (inbound/outbound). As shown below, the rendezvous circle is composed of four points, with point one located at the TACAN fix and subsequent points located at 90 degree intervals around the circle.



Upon reaching the TACAN fix, the lead simultaneously calls his "Call sign, Point One" and commences a 30 degree AOB turn in the briefed direction. Passing each 90 degree position, lead transmits his position until wing acquires a visual. The lead must adjust the rendezvous turn, to compensate for wind, so that point one is always the briefed radial and DME. The wingman will fly towards the briefed rendezvous point 500 feet below the briefed TACAN fix. Wing will remain 500 feet below lead until lead is in sight. The wing, approaching point one, shall transmit "wing, point one" and commence a turn in the direction briefed. Each flight member will report their position, as required, in the rendezvous circle as they pass each respective number. From position reports, wing will establish an idea of

lead's relative position. When wing visually acquires lead, wing will call "Visual" and proceed to 200 feet below the briefed altitude. Wing will maneuver to get on the 60 degree bearing line and then proceed with a standard CV rendezvous.

Initially, if the lead's aircraft is behind the wing's wing line when a visual sighting is attained, the wingman should proceed into the center of the circle and maneuver the aircraft in the lead/lag manner. The concept of lead/lag should be used to initiate a position from which the bearing line can be attained. If lead is cross circle from wing, the wing should put the lead just slightly ahead of the nose in order to close the distance. When lead has moved approximately 30 degrees beyond wing's nose, wing should again put lead just in front of the nose to close the distance. Once wing has closed to a suitable distance, wing should attain fuselage alignment and continue with rendezvous as described above.

D7. Update Section 502, Paragraph 13: Delete Paragraph 13.

D8. Replace FORM 1 SEQUENCE on Pg 5-19 with"

FORM 1 SEQUENCE: Demo/Intro

Departure (VFR or IFR Rendezvous on Top)
Running Rendezvous
Starboard Parade Demo/Intro (Lube the Line)
Starboard Parade Turns (180 Demo/360 Intro)
Crossunder to Port Demo/Intro
Port Parade turns (180 Demo/360 Intro)
Free Cruise (Demo/Intro)
Running Rendezvous (Intro)
Breakup and Rendezvous (Demo/Intro)
Lead Change (Intro)
Running Rendezvous
Starboard Parade Demo/Intro (Lube the Line)
Starboard Parade Turns (180 Demo/360 Intro)
Crossunder to Port Demo/Intro
Port Parade turns (180 Demo/360 Intro)
Free Cruise (Demo/Intro)
Running Rendezvous (Intro)
Breakup and Rendezvous (Demo/Intro)
Lead Change (Intro)

Form 2 Sequence: Practice

IP Only/Grading
A-Instruction
B-Grading

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A1. Emphasize technique versus procedure. Do not fault students for using another IP's technique whether you agree or not. (Examples stated -"Call my light out during the autofeather check.") These are techniques that do not detract from standardization.

B1. Per MPTS, instructors must complete and grade each "+" item at least every third sortie following maneuver introduction.

B2. IPs shall grade at a minimum, the first four items in the MIF (General Knowledge, Emergency Procedures, Headwork/SA and Basic Airwork) for each sortie.

B3. MPTS sortie completion criteria: The MCGs set out certain criteria for completing student sorties. In addition to using the criteria listed, IPs shall incomplete any Contact sortie (C41XX or C42XX) if sufficient pattern work was not accomplished. Sufficient pattern work is left up to the discretion of the IP.